In the Claims

1. (original) A method for modeling a plurality of graphics models, comprising:

generating a first adaptively sampled distance field for a first model;

generating a second adaptively sampled distance field for a second model;

sampling locations in the first adaptively sampled distance field to determine a distance value for each location;

sampling the second adaptively sampled distance field at each location to determine a corresponding feature of the second adaptively sampled distance field for each location; and

modifying each distance value according to the corresponding feature to determine a second distance value for each location.

2. (original) The method of claim 1 further comprising:

generating a third adaptively sampled distance field from the modified distance values.

3. (original) The method of claim 2 further comprising:

rendering the third adaptively sampled distance field.

4. (original) The method of claim 1 wherein the feature is a distance value of the second adaptively sampled distance field, and further comprising:

combining the first distance value with the distance value of the second adaptively sampled distance field to determine the third distance value.

5. (original) The method of claim 4 wherein the combining is according to a blending function to blend the first and second models.

6. (original) The method of claim 1 wherein the plurality of models have more than two dimensions.

7. (original) The method of claim 1 wherein at least one model is a two-dimensional glyph.

8. (original) The method of claim 1 wherein at least one model is a four-dimensional color gamut.

9. (original) The method of claim 1 wherein at least one model is a hyper-dimensional physical system model.

10. (currently amended) The method of claim 1 ~~and~~ or claim 2 wherein the generating comprises defining a candidate cell of the adaptively sampled distance field, determining and storing distance values of the candidate cell in a bounded distance tree, recursively subdividing the candidate cell into subdivided cells of the adaptively sampled distance field while determining and storing corresponding distance values of the subdivided cells in the bounded distance tree until a termination condition is reached, and appending the distance values to the corresponding cells to generate the adaptively sampled distance field of the object.